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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,361	09/30/2003	Tomohiro Takahashi	Q77771	4357
23373 7590 11/08/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER POON, HOA K	
			ART UNIT 4157	PAPER NUMBER
			MAIL DATE 11/08/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/673,361

Applicant(s)

TAKAHASHI ET AL.

Examiner

Hoa Poon

Art Unit

4157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on September/30/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claim 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "A moving amount of" in claim 10 and 11 is indefinite because the specification does not clearly redefine the term.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent; or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English.

3. Claim 1,2,9,12,13,14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Taoda, US 6,480,295 B1 (hereinafter "Taoda").

Art Unit: 4157

Regarding claim 1:

Taoda discloses the following as claimed:

A printing method for printing a print image on a medium comprising:

A step of storing, in a memory area, image data that has been generated by reading an image in an original; (Col. 1, line 66-67 and Col. 2, line 1)

A step of determining whether or not the whole image data corresponding to said print image can be stored, in terms of size, in said memory area; (Col. 2, line 9-15) and

A step of performing printing up to a preset number of sheets based on the image data in said memory area if it is determined that the whole image data can be stored in terms of size. (See fig. 9, element s105, s106, s107, s108, s109 and s114)

Regarding claim 2:

A printing method according to claim 1, wherein:

If it is determined that the whole image data can be stored in terms of size, printing is performed up to the preset number of sheets based on the image data in said memory area without re-reading said image. (Col. 6, line 53-65, also fig.7)

Regarding claim 9:

A printing method according to claim 1, wherein:

an area determination for determining an area of the image of said original necessary for printing is performed based on the image data that has been generated by reading the image in the original; (See fig. 9, element s105, s106 and s107)

Art Unit: 4157

Whether or not the whole image data corresponding to said print image can be stored, in terms of size, in said memory area is determined based on a result of said area determination; and

if it is determined that the whole image data can be stored in terms of size, data that has been re-read for the original having been subjected to said area determination is stored in said memory area based on the result of said area determination, and

printing is performed up to the preset number of sheets based on the image data in said memory area. (See fig.9)

Regarding claim 12:

A printing method according to claim 9, wherein, if it is determined that the whole image data cannot be stored in terms of size:

operation of reading the original is performed every time printing is performed; and

printing is performed up to the preset number of sheets using the image data obtained by the reading operation. (Col. 7, line 58-67 and col. 8, line 1-9)

Regarding claim 13:

A printing method according to claim 9 wherein:

said area determination is performed according to an image-reading operation that is not accompanied with printing. (Col. 17, line 33-41)

Regarding claim 14:

A printing method according to claim 9 wherein:

Art Unit: 4157

said area determination is performed according to an image-reading operation that is accompanied with printing. (See claim 13)

Regarding claim 15:

Claim 15 corresponds to method claims 1 and 9. Thus, it is analyzed and rejected as applied to claims 1 and 9.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in **Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966)**, that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: (*See MPEP Ch. 2141*)

- a. Determining the scope and contents of the prior art;
- b. Ascertaining the differences between the prior art and the claims in issue;
- c. Resolving the level of ordinary skill in the pertinent art; and
- d. Evaluating evidence of secondary considerations for indicating obviousness or nonobviousness.

5. **Claim 3,4,5,6,7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taoda US 6,480,295 in view of Moro et al, US 6,327,051**

Regarding claim 3: Taoda does not explicitly disclose as claimed:

A printing method according to claim 2, wherein:

Art Unit: 4157

whether or not the whole image data corresponding to said print image can be stored in terms of size, in said memory area is determined based on copy-quality-mode information that is defined by either a type of the medium or a copy quality, or a combination thereof. However, the concept and advantage of a printing control apparatus and method which has copy-quality-mode as well as color printing is evidenced in Moro (See Moro, Col. 11, Table 1, also fig. 9)

Therefore, the combined teachings of Taoda and Moro would have rendered obvious printing with copy-quality-mode and color printing.

Regarding claim 4:

A printing method according to claim 3, wherein:

whether or not the whole image data corresponding to said print image can be stored, in terms of size, in said memory area is determined based on a combined mode that is a combination of said

copy-quality-mode information, and

color/monochrome print mode information that defines which of either one of the following print modes printing is performed:

color printing, or monochrome printing.

Claim 4 is substantially similar to claim 3. Thus, it is rejected as applied to claim 3 as for monochrome print mode as claimed; that limitation would have been implied and expected in association with color print mode.

Regarding claim 5: Taoda in view of Moro further teaches the limitation as claimed:

A printing method according to claim 4, wherein:

Art Unit: 4157

the size of said memory area is set to be equal to or larger than a maximum size of image data that is generated when performing reading according to at least one mode among a plurality of said combined modes. (See Taoda, Col. 1, line 67 and Col. 2, line 1-6)

Regarding claim 6: Taoda in view of Moro further discloses:

A printing method according to claim 5, wherein:

the image data is successively stored in said memory area until free space thereof runs out; and

if said free space runs out, the image data is stored in an area where image data that has already been read out used to exist. (See Taoda, Col. 4, line 66-67, and Col. 5, line 1-7).

Regarding claim 8: Taoda in view of Moro further teaches the limitation as claimed:

A printing method according to claim 3, wherein, if it is determined that the whole image data cannot be stored in terms of size as a result of determining whether or not the whole image data corresponding to said print image can be stored, in terms of size, in said memory area based on said copy-quality-mode information: (See claim 3)

an area determination for determining an area of the image of said original necessary for printing is performed based on the image data that has been generated by reading the image in the original;

whether or not the whole image data corresponding to said print image can be stored, in terms of size, in said memory area is determined based on a result of said area determination; (See claim 1) and

Art Unit: 4157

if it is determined that the whole image data can be stored in terms of size, data that has been re-read for the original having been subjected to said area determination is stored in said memory area based on the result of said area determination, and

printing is performed up to the preset number of sheets based on the image data in said memory area. (See Taoda, Col. 7, line 58-67, Col. 8, line 1-9, Col. 7, line 21-39, also fig.9)

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taoda US 6,480,295 in view of Moro further in view of Moriura et al, US 7,034,961
Regarding claim 7, Taoda in view of Moro does not explicitly disclose as claimed:

A printing method according to claim 6, wherein:

said image data is CMYK data.

However, Moriura discloses a forming and printing CMYK data. (Col. 7, line 28-50, also fig. 5)

Taking the combined teaching of Taoda, Moro and Moriura as a whole, it would have been obvious to store and print CMYK data as claimed.

Conclusion

The prior art made of record is not relied upon considered pertinent to applicant's disclosure.

Simpson (US 7,145,685 B2) discloses a method and apparatus facilitate printing N collated copies of a document on a printer.

Kizawa (US 6,967,731) discloses a multifunction apparatus and data printing method.

Pekelman (5,838,883) discloses a copying attachment that enables employing a fast high-quality digital press also as a direct copier.

Contact Information

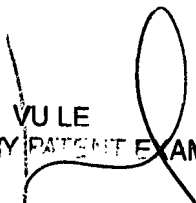
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Poon whose telephone number is (571) 270-3758. The examiner can normally be reached on 8:30 am - 5:00 pm M-F EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4157

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hoa Poon/
Examiner, Art Unit 4157


VU LE
SUPERVISORY PATENT EXAMINER